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TITLE: Method for manufacturing valve spring for engine having high fatigue resistance

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BASIC-ABSTRACT:

NOVELTY - A method for manufacturing a valve spring for an engine is provided to manufacture a valve spring which is more durable under a high stress compared with an existing valve spring by changing the conventional manufacturing process to increase a fatigue life of a valve spring, thereby forming residual compression stress inside a coil.

DETAILED DESCRIPTION - The method for manufacturing a valve spring for an engine comprises the processes of a quenching process in which the spring material is heated at a temperature of 850 deg.C for 10 minutes, cooled in a salt bath having a temperature of 320 deg.C for 90 seconds before cooling and air cooling, tempering the coil at a temperature of 350 to 450 deg.C for 30 minutes after coiling the material in the state that a fresh raw material is not heat treated, polishing and shot peening the coil, and tempering and setting the coil so that a residual compression stress layer formed at over 0.2

mm depth from surface of the coil thereby improving fatigue resistance of a valve spring.

CHOSEN-DRAWING: Dwg.1/10

TITLE-TERMS: METHOD MANUFACTURE VALVE SPRING ENGINE HIGH FATIGUE RESISTANCE

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